Data Sheet

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FUJITSU COMPUTERS SIEMENS

PRIMERGY TX200 S4

Dual Socket Quad-Core Intel® Xeon® Server - Cost-efficient expansion options and failsafe operation

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PRIMERGY TX Tower Servers ensure energy efficient, carefree and continuous operation with proven data center technology. Their design for maximum ease of use and ease of management has been honored with industry design awards. The latest processor generation combined with innovative air flow cooling technology ("Cool-safe™") assures a long life and the highest possible performance at work. And as your business grows, so do our PRIMERGY TX servers, providing plenty of headroom for expansion so that you benefit longer from your investments in PRIMERGY tower servers.

For corporate workgroups and remote sites, PRIMERGY TX servers ensure less troubleshooting and lower costs with their complete PRIMERGY ServerView Suite remote management functions – flexible management from anywhere at any time.

The flexible custom supply model and our build-to-order process mean that only fully built and pre-tested solutions are shipped to customers, who can select from a broad family of tower models to meet their individual needs.

PRIMERGY TX200 S4

Flexible expansion options are the key to placing new or larger workloads on your server. This applies not only to physical capacity, such as the number of disk drives, advanced data protection schemes, or I/O connectivity; in particular consideration of the transition to 64-bit computing and virtualization is a must in today's technology purchase decisions.
The PRIMERGY TX200 S4 uses a completely new housing and is a perfect match for these requirements, providing you with a previously unreached cost-efficient standard. TX200 is a failsafe operation platform for your application stacks, with standards such as disk mirroring for SAS and SATA, hot-plug disks, SDDC and hot-spare memory and the "Cool-safe™" innovative air flow system design. Expandability is covering for heavy workload: up to 24 GB FBD667 memory, up to 8 (16) 2.5-inch SAS hard disk drives, and 7 (6) free PCI slots for heavy I/O requirements. Your business can rely on this solution!
In addition, further options – such as extended RAID functions, clustering options and redundancy for power supplies and fans – tailor these standards to your individual safety needs.

Benefits	Key Features
■ High security against physical loss of data	■ ECC, built-in RAID 1 functionality and optional ibutton RAID 5 for SATA or modular RAID for SAS configurations
■ Tailor made availability, offers the security level which is recommended by your individual application demands	■ Hot-plug HDD infrastructure (standard) Hot-plug redundant PSU (optional) Redundant fans (optional) ServerView Local Service Panel (LSP) (optional)
■ Allowing the platform to do more in less time, IT departments can consolidate applications and more effectively employ the server with less power consumption	■ Energy efficient Intel Quad-Core processor (5400 series), provides four execution cores (2x 6 MB Cache) in one physical processor with less power consumption
■ Expandability options for further growth	■ Up to 4x SATA or 4 (6)x SATA/SAS 3.5-inch, up to 8 (16)x 2.5-inch SAS hard disks, 7 PCI/PCIe slots, (6 with SAS), 1x Gbit LAN plus extra Service LAN for iRMC S2

Type	Dual Socket Tower Server
System board	D 2509
Chip set	Intel® 5000Z
Processors	Dual- or Quad-Core Intel® Xeon® (1 - 2)
Frequencies (GHz)	E5205 (1.86) 65W DC / L5310 (1.60), L5410 (2.33), L5420 (2.50) 50W QC / E5405 (2,00), E5420 (2.50) E5430 (2.66 GHz) 80W QC
Front-Side-Bus	1066 (E5205, L5310), 1333 MHz
SLC	2x4 MB (53xx), 6 MB (E52xx), 2x 6 MB (54xx) ECC
Memory	1 GByte up to max. 24 GByte
2-way interleaved, registered ECC PC2--5300F FullyBuffered DIMM RAM; 3 banks with 2 slots each for modules 512 MB, 1, 2 and 4 GB; SDDC (Chipkill) and hot-spare memory opt.	
Flash-EPROM	
Local BIOS update with floppy disk; Remote BIOS-Update via LAN with Global Flash and service partition	
Interfaces	
Serial 1	1x RS-232-C (9-pin) (usable for iRMC or system or shared)
Serial 2	1x RS-232-C (9-pol)
Parallel (option)	Centronics, 25-pin, EPP/ECP comp.
Keyboard, Mouse	2x PS/2
USB 2.0	1x front, 2x back (UHCI, 480 Mbit/s) 2x internal for backup drive
Graphics	1x VGA (15-pin)
LAN	1x RJ45, 1x Service-LAN 10/100 (can be switched on Gbit port)
Front Panel	
On/off switch; NMI-, reset button; LEDs for global error (amber/ yellow for Health and CSS), identification (blue), hard disks access (green), power (amber/green); (back: global error, identification, LAN activity, LAN mode)	
Onboard controller**	
IDE (ATA100)	1-channel Fast-IDE controller for 1 device
SATA configuration (6311ESB)	4-port SATA for internal HDD`s with RAID 0, 1, 10 for Windows and Linux, RAID 5 iButton key optional) plus 2x for accessible drives
SAS configuration **in PCIe slot either** LSI 1068 **or** LSI 1078	8 port SAS for internal HDD´s and internal backup devices with RAID 0, 1 (Integrated Mirroring Enhanced also for odd numbered HD´s for Windows and Linux) with RAID 0, 1, 10 5, 50, 6, 60 (256 or 512 MB RAID Cache and opt. BBU)
LAN (BCom 5708)	1x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration)(PXE-Boot via LAN from PXE server), iSCSI Boot (also diskless) via onboard LAN
Server management	Integrated Remote Management Controller (iRMC S2, 32 MB attached memory) incl. graphics controller, IPMI 2.0
Hard disk drives	73, 146, 300 Gbyte 3.5-inch SAS **or** 36, 73, 146 Gbyte 2.5-inch SAS **or** 160, 250, 500, 750 Gbyte 3.5-inch SATA 3.5-inch SAS / SATA mix only in separate HD-cages and in separate RAID sets, no later conversion from 3,5 to 2,5-inch possible
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	
I/O Slots (Standard)	
4x PCIe x8 (x4 wired), 2x long, (1x for modular SAS RAID controller), (2 slots x8 with performance adapter) 2x PCI-X 64-bit/ 100 MHz, long, 3,3V; (1x with max. 133 MHz (IOOP™), if only 1 Slot is occupied) 1x PCI 32-bit / 33 MHz, 5V	
Drive bays	
for hard disks	4x 3.5-inch, for Hot-plug SAS/SATA **or** 4 or 8x 2.5-inch for Hot-plug SAS
for optional hard disks	2x 3.5/1-inch HDD box only in SAS configuration **or** 8x 2.5-inch for SAS (occupy 2x 5.25/1.6-inch bay)
for accessible drives	3x 5.25/1.6-inch, (all possible options described in relevant system configurator) 1x 3,5/1-inch, for FDD (optional)
System fans	
Standard 3 fans, redundant (option): 3 + 1 fans	
Electrical values ***	
1x standard or 2x optional redundant hot-plug power supplies	
Output power	700 W / 1 + 1 x 700 W each
Rated voltage range	100 – 127 V / 200 - 240 V
Rated frequency	50 - 60 Hz
Max. rated current	100 – 127 V / 200 - 240 V 9.0 A / 4.5 A
Rated current in basic configuration	100 – 127 V / 200 - 240 V 2.0 A / 0.86 A
Active power	512 W
Apparent power	531 VA
Heat emission	1843 kJ/h (1746 btu/h)
Temperature/Noise/Dimensions/Weight	
Ambient temperature	10°C - 35°C (DIN IEC 721-3-3) class 3K2 ETSI 300 019-2-3 Class 3.1
Declared noise emission according to ISO 9296	idle* operating* *(ISO 7779) ETSI 300 753 Class 3.1
L_{WAd} (1 B = 10 dB) :	5.3 B*** 5.4 B***
L_{pAm} (bystander position):	35 dB*** 37 dB***
Floor-stand (HxWxD)mm	447 x 215 (372 with tilt protection) x 699
Rack (HxWxD)	215 x 486 x 777 mm; Rack mounting depth 742 mm; 5U
Weight	35 kg (configuration dependent)
Compliance with Norms and Standards	
Product safety	
Global	IEC 60950-1
Europe	EN 60950-1
USA	UL 60950-1
Canada	CAN/CSA C22.2 No. 60950-1-03
Electromagnetic compatibility	
This product and the released accessories, are in compliance with emission class A. In certain cases measures have to be taken to reduce the electro magnetic influence to other equipment.	
Europe	EN 55022 class A, EN 55024, EN 61000-3-2 / 3-3, ETSI EN300386
Taiwan / Japan	CNS 13438 class A; VCCI class A
Australia / New Zealand	AS / NZS CISPR 22 class A
USA / Canada	FCC class A
Declaration of conformity	
Europe (CE)	2004/108/EC(EMC);2006/95 EC(LVD)
North America	FCC class A
Approvals	
Product safety	
Global	CB
Europe	CE
USA / Canada	CSA_{US} / CSA_{C}
There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons, can be applied for on request.	
Supported server operating systems	
See actual release status operating systems: e.g. Windows Server 2003; Windows Server 2008, Novell SUSE Linux Enterprise Server , Red Hat Enterprise Linux; VMware ESX (Support of Debian, Ubuntu, Mandriva Linux and other Linux derivatives on demand)	
** For supported controllers (onboard and PCI cards for SAS, SATA, RAID, LAN, WAN, etc.), please refer to the corresponding system configurator. *** only with standard fans and standard PSU	
Server Management (see separate data sheets)	
Standard:	PRIMERGY ServerView Suite; PDA, ASR&R
Optional: (excerpt)	iRMC S2 Advanced Pack, ServerView Local Service Panel (LSP)

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